

# Composers' # Desktop # Project

# A-Z INDEX OF CDP FUNCTIONS

The use of brackets in a name indicates the CDP function group to which that process or function has been allocated, within the reference documentation.



# [MCTOOLKIT] ABFPAN

Apply fixed or orbiting 1<sup>st</sup> order B-Format pan to a mono soundfile [MCTOOLKIT] **ABFPAN2** 

Apply fixed or orbiting  $2^{nd}$  order B-Format pan to a mono soundfile FOCUS  $\mathbf{ACCU}$ 

Sustain each spectral band, until louder data appears in that band SUBMIX **ADDTOMIX** 

Add soundfiles to an existing mixfile

# [SYSUTILS] ALIAS

Create a shortcut to a soundfile (PC only)

## **GRAIN ALIGN**

Synchronise grain onsets in 2<sup>nd</sup> grainy sound with those in the 1<sup>st</sup>

#### PITCH **ALTHARMS**

Delete alternate harmonics

## **PVOC ANAL**

Convert soundfile to spectral file

#### REPITCH ANALENV

Extract the window-loudness envelope of an analysis file

#### REPITCH APPROX

Make an approximate copy of a pitchfile

### GRAIN **ASSESS**

Estimate best gate value for gain extraction

#### SUBMIX ATSTEP

Convert a list of soundfiles to a mixfile

## **ENVEL ATTACK**

Emphasize the attack of a sound

## **SUBMIX ATTENUATE**

Alter the overall level of a mixfile

#### **DISTORT AVERAGE**

Average the waveshape over N 'wavecycles'

# BLUR AVRG

Average spectral energy over N adjacent channels

B

# EXTEND BAKTOBAK

Join backwards copy to forwards original, in that order

# HOUSEKEEP BAKUP

Concatenate soundfiles into one backup file, with silences between SUBMIX **BALANCE** 

Mix between 2 soundfiles, using a balance function



#### HILITE BAND

Split spectrum into bands and process these individually

#### FILTER BANK

Bank of filters, with time-variable Q

## FILTER BANKFRQS

Generate a list of frequencies for use in a filter bank (add amplitudes to the text file for use with FILTER USERBANK)

#### SPEC BARE

Zero the data in channels that do not contain harmonics

#### HOUSEKEEP BATCHEXPAND

Expand an existing batchfile

#### HILITE BLTR

Blur the spectral data over time, and TRACE the partials

## BLUR BLUR

Blur the spectral data over time

## **MODIFY BRASSAGE**

Granular reconstitution of a soundfile

#### MORPH BRIDGE

Make a bridging interpolation between two sound spectra by interpolating between 2 time-specified windows in the 2 infiles

## **ENVEL BRKTOENV**

Convert (text) breakpoint envelope to binary envelope file

# [REPITCH] BRKTOPI

Convert a breakpoint pitch data file to a binary pitch data file

#### HOUSEKEEP BUNDLE

List filenames in textfile for sorting, backup or creating a dummy mixfile

# C

# [SFEDIT] CANTOR

Cut holes in a sound in the manner of a cantor set (holes within holes within holes)

# [SYSUTILS] CDPCONV

Utility to convert analysis files from PPC to Intel format (MAC only)

#### [EXTEND] **CERACU**

Repeat the source sound in several cycles that synchronise after specified counts

#### SNDINFO CHANDIFF

Compare channels in a stereo soundfile

# SPECINFO CHANNEL

Returns PVOC channel number corresponding to frequency given

#### [MCTOOLKIT] CHANNELX

Extract all or selected channels from a multi-channel soundfile

# [HOUSEKEEP] **CHANPHASE**

Invert phase of one channel of an input sound

# HOUSEKEEP CHANS

Extract or convert channels of a soundfile

#### PSOW CHOP

Cut sound into sections between specified grain (chunks)

# PITCH CHORD

Transposed versions of a sound are superimposed on the original

#### PITCH CHORDF

Transposed versions of the spectrum are superimposed within the existing spectral envelope



#### SYNTH CHORD

Generate a chord with a simple waveform

### [MCTOOLKIT] CHORDER

Reorder soundfile channels in a multi-channel soundfile

#### BLUR CHORUS

Add random variation to amplitude or frequency in analysis channels

### [MCTOOLKIT] CHXFORMAT

Modify WAVE\_EX header to change GUID and/or speaker positions

#### SPEC CLEAN

Remove noise from PVOC analysis file

#### SPECNU CLEAN

Eliminate from the source file any persisting signal that falls below a threshold (defined by the *noisfile*)

## SYNTH CLICKS

Create a click track from tempo, meter & barring data

# [SYSUTILS] COLUMNS

Manipulate or generate columns of numbers

### **ONEFORM COMBINE**

Generate a new sound from pitch information and a single-moment-formant

## REPITCH COMBINE

Generate transposition data from 2 sets of pitch data,

or transpose pitch data with transposition data,

or combine 2 sets of transposition data to form new transposition data, producing a binary pitch data file output

#### REPITCH COMBINEB

Generate transposition data from 2 sets of pitch data,

or transpose pitch data with transposition data,

or combine 2 sets of transposition data to form new transposition data, producing a *time value* breakpoint file output

# [SFEDIT] CONSTRICT

Shorten the length of any silences in a sound

#### PITCHINFO CONVERT

Convert a binary pitch data file to a time frequency breakpoint text file

## **MODIFY CONVOLVE**

Convolve the first sound with the second

## HOUSEKEEP COPY

Produce or delete copies of the infile

## [MCTOOLKIT] COPYSFX

Copy soundfiles / convert from one format to another

# **GRAIN COUNT**

Count grains found in a sound (at given gate and minhole values)

### **ENVEL CREATE**

Create an envelope

## SUBMIX CROSSFADE

Quick crossfade between soundfiles (with same number of channels)

# **ENVEL CURTAIL**

Curtail a soundfile by fading to zero at some time within it

#### REPITCH CUT

Cut out and keep a segment of a binary pitch data file

#### SFEDIT CUT

Cut and keep a segment of a sound

## SPEC CUT

Cut a section out of an analysis file, between *starttime* and *endtime* (seconds)

# **PSOW CUTATGRAIN**

Cut at exact FOF-grain time

# SFEDIT CUTEND

Cut and keep end portion of a sound



#### SFEDIT CUTMANY

Cut and keep several segments of a sound

#### DISTORT CYCLECNT

Count 'wavecycles' in soundfile

#### ENVEL CYCLIC

Create a sequence of repeated envelopes, in a binary envelope file

# D

#### **ENVEL DBTOENV**

Convert a (text) breakpoint file with values in dB to an envelope file

#### **ENVEL DBTOGAIN**

Convert (text) breakpoint file with dB values to gain values (0-1)

# **TEXTURE DECORATED**

Create a texture with decorations

#### HOUSEKEEP **DEGLITCH**

Attempt to deglitch a soundfile

#### DISTORT DELETE

Time-contract file by deleting 'wavecycles'

#### **PSOW DELETE**

Time shrink sound by deleting a proportion of the pitch-synchronised FOF-grains

# COMBINE **DIFF**

Find (and retain) the difference between two spectra

#### SNDINFO **DIFF**

Compare two sound, analysis, pitch, transposition, envelope or formant files

# [SYSUTILS] **DIRSF**

Soundfile directory listing

# HOUSEKEEP **DISK**

Display available space on disk

#### DISTORT DIVIDE

Distortion by dividing 'wavecycle' frequency

## [MODIFY] **DSHIFT**

Add Doppler effect to a panned soundfile

#### EXTEND **DOUBLETS**

Divide a sound into segments that repeat, and splice them together

## **ENVEL DOVETAIL**

Dovetail soundfile by enveloping the start and end of it

#### BLUR **DRUNK**

Modify sound by a drunken walk along analysis windows

#### EXTEND **DRUNK**

Splice segments of source file end-to-end: start times (in source file) of segments chosen by 'drunken walk' through source file; in Mode 2, Source file plays soberly at holds

# SUBMIX **DUMMY**

Convert a list of soundfiles into a basic mixfile (for editing)

# **PSOW DUPL**

Timestretch/ transpose a sound by duplicating the pitch-synchronised FOF-grains

# **GRAIN DUPLICATE**

Duplicate grains in a grainy sound



# E

### [EXTEND] SFECHO ECHO

Repeat a sound with timing and level adjustments between repeats

### HOUSEKEEP ENDCLICKS

Remove clicks from start or end of file

#### DISTORT ENVEL

Impose envelope over each group of cyclecnt 'wavecycles'

#### ENVEL **ENVTOBRK**

Convert a binary envelope file to a (text) breakpoint envelope

#### ENVEL **ENVTODB**

Convert a binary envelope file to a (text) breakpoint envelope with dB values

# FOCUS **EXAG**

Exaggerate the spectral contour

#### REPITCH **EXAG**

Exaggerate pitch contour

## SFEDIT **EXCISE**

Discard specified chunk of sound, closing up the gap

#### SFEDIT **EXCISES**

Discard specified chunks of a sound, closing up the gaps

#### **ENVNU EXPDECAY**

Produce a true exponential decay to zero on a sound

# **ENVEL EXTRACT**

Extract envelope from an input soundfile

# HOUSEKEEP EXTRACT

Extract significant data from recorded soundfiles

## **PVOC EXTRACT**

Analyse, then resynthesise with various options

# F

# SUBMIX FADERS

Mix several soundfiles using a time-changing level-balance function

#### [REVERB] **FASTCONV**

Multi-channel FFT-based convolution

#### **PSOW FEATURES**

Impose new features on vocal-type sound, preserving or modifying F0F-grains

# SUBMIX FILEFORMAT

Returns information about mixfile fileformats

#### DISTORT FILTER

Time-contract sound by filtering out 'wavecycles'

# HILITE FILTER

Hipass, lopass, bandpass and notch filters, on spectral data

#### [FILTER] **FILTRAGE**

Generate randomised VARIBANK filterbank files

#### REPITCH FIX

Massage pitch data in a binary pitchfile

# GRAIN FIND

Locate timings of grain onsets in a grainy sound

# SNDINFO FINDHOLE

Find largest low level hole in a soundfile

## MODIFY FINDPAN

Find stereo pan-position of a sound in a stereo file



#### FILTER FIXED

Cut or boost, above, below or around a given frequency

[MULTICHANNEL] FLUTTER

Add multi-channel distributed tremolo to a multi-channel file

[MCTOOLKIT] FMDCODE

Decode  $\mathbf{1}^{\text{st}}$  or  $\mathbf{2}^{\text{nd}}$  order B-Format soundfile to a choice of speaker layouts FOCUS **FOCUS** 

Focus spectral energy onto the peaks in the spectrum

FOCUS FOLD

Octave-transpose spectral components into a specified frequency range DISTORT **FRACTAL** 

Superimpose miniature copies of source 'wavecycles'onto themselves [MULTICHANNEL] **FRACTURE** 

Disperese a mono signal into fragments spread over *N*-channel space [MULTICHANNEL] **FRAME SHIFT** 

Reorient or rotate a multi-channel file

EXTEND FREEZE

Freeze a segment of a sound by iteration in a fluid manner

FOCUS FREEZE

Freeze the spectral characteristics in a sound, at given times, for specified durations

SPECINFO FREQUENCY

Returns centre frequency of PVOC channel specified

# G

#### **ENVEL GAINTODB**

Convert (text) breakpoint file with gain (0&150;1) values to dB values SPEC GAIN

Amplify or attenuate the spectrum

[HOUSEKEEP] GATE

Remove low-level sound from signal

**HOUSEKEEP GATE** 

Cut file at zero amplitude points

SPEC GATE

Eliminate channel data below a threshold amplitude

REPITCH GENERATE

Create binary pitch data from a textfile of time midi value pairs

FORMANTS GET

Extract evolving formant envelope from an analysis file

**ONEFORM GET** 

Extract formant-envelope at a specific time in an existing CDP formant file [SYSUTILS] **GETCOL** 

Extract a column of numbers from a textfile

SUBMIX **GETLEVEL** 

Test the maximum level of a mix, defined in a mixfile and suggest a gain factor to avoid overload, if necessary

[SPECINFO] **GET\_PARTIALS** 

Extract relative amplitude of partials in a pitched source

REPITCH GETPITCH

Extract pitch from spectrum to a pitch data file

FORMANTS GETSEE

Get formant data from an analysis file and write as a pseudo-soundfile for viewing



#### STRANGE GLIS

Create glissandi inside the (changing) spectral envelope of the original sound [HILITE] **GLISTEN** 

Randomly partition the spectrum into bins and play back in order

**PSOW GRAB** 

Grab a pitch-synchronised grain from a file, and use it to create a new sound SPEC **GRAB** 

Grab a single analysis window at time point specified

HILITE GREO

Graphic eg type filter on the spectrum

**GRAIN GREV** 

Find and manipulate 'grains', using envelope troughs and zero-crossings [GRAIN] **GRAINEX** 

Find grains in a sound and extend the area that contains them

TEXTURE **GROUPED** 

Create textures from groups of events

# Н

#### **DISTORT HARMONIC**

Harmonic distortion by superimposing 'harmonics' onto 'wavecycles' PITCHINFO **HEAR** 

Convert binary pitchfile to analysis test tone file (resynthesise to hear pitch) FOCUS **HOLD** 

Hold sound spectrum, at given times

[EXTEND] HOVER

Move through a file, zig-zag reading it at a given frequency

# Ι

#### **ENVEL IMPOSE**

Impose an envelope on an input soundfile

PSOW IMPOSE

Impose vocal FOFs in 1<sup>st</sup> sound onto the 2<sup>nd</sup> sound

# SUBMIX INBETWEEN

Generate a set of sounds inbetween the 2 input sounds (same number of channels) through weighted mixes of the input sounds, from mostly sound 1 to mostly sound 2

# SUBMIX INBETWEEN2

Generate a set of sounds inbetween the 2 input sounds (same number of channels) through interpolation pegged to zero-crossings

PITCHINFO INFO

Display information about pitch data in pitchfile

# SFEDIT INSERT

Insert a 2<sup>nd</sup> sound into an existing sound



REPITCH INSERTSIL

Mark areas as silent in a pitch data file

REPITCH INSERTZEROS

Mark areas as unpitched in a pitch data file

SFEDIT INSIL

Insert silence into an existing sound

**DISTORT INTERACT** 

Time-domain interaction of sounds

**COMBINE INTERLEAVE** 

Interleave (groups of) windows of several spectra

**PSOW INTERLEAVE** 

Interleave FOF-grains from two different soundfiles

SUBMIX INTERLEAVE

Interleave mono infiles to make a multi-channel outfile

[MCTOOLKIT] INTERLX

Interleave mono or stereo files into a multi-channel file

**PSOW INTERP** 

Interpolate between 2 pitch-synchronised grains, to produce a new sound

REPITCH INTERP

Replace noise or silence by pitch interpolated from existing pitches

**DISTORT INTERPOLATE** 

Timestretch file by repeating 'wavecycles' and interpolating between them

REPITCH INVERT

Invert pitch contour of a pitch data file

STRANGE INVERT

Invert the spectrum

[SFEDIT] **ISOLATE** 

Disjunct portions of soundfile are specified by textfile or dB loudness

**EXTEND ITERATE** 

Iterate an input sound in a fluid manner

FILTER ITERATED

Iterate sound, with cumulative filtering by a filterbank

[EXTEND] **ITERLINE** 

Iterate an input sound, following a transposition line

**ITERLINEF** 

Iterate an input sound set, following a transposition line

SFEDIT JOIN

J

Join files together, one after another

SFEDIT JOINDYN

Join soundfiles in loudness-patterned sequence

SFEDIT JOINSEQ

Join soundfiles in patterned sequence

#### SPECINFO LEVEL

Convert (varying) level of analysis file to a pseudo-soundfile, for viewing (1 window -> 1 sample)



SNDINFO LEN

Display duration of a soundfiling-system file

SNDINFO LENS

List durations of several soundfiling-system files

[SYSUTILS] **LISTAUDEVS** 

List available audio devices

**PSOW LOCATE** 

Locate exact start time of the nearest grain

FILTER **LOHI** 

Fixed low-pass or high-pass filter

EXTEND LOOP

Loop inside a soundfile

SNDINFO LOUDCHAN

Find loudest channel in a stereo soundfile

**MODIFY LOUDNESS** 

Adjust loudness of a soundfile

# M

## [EXTEND] MADRID

Spatially syncopate repetitions of the source soundfile(s)

COMBINE MAKE

Generate an analysis file from data in a formant data file and a pitch data file COMBINE MAKE2

Generate a spectrum from only pitch, formant & envelope data

[SFEDIT] MANYSIL

Insert many silences into a soundfile

**COMBINE MAX** 

Retain loudest channel components per window amongst several spectra

SNDINFO MAXI

List levels of several soundfiles

SNDINFO MAXSAMP

Find maximum sample in soundfile or binary data file

**SNDINFO MAXSAMP2** 

Find maximum sample within a specified timerange in a soundfile

[MULTICHANNEL] MCHANPAN

Pan sounds around a multi-channel space

[MULTICHANNEL] MCHANREV

Create multi-channel Echoes or Reverb

[MULTICHANNEL] MCHITER

Iterate the input sound in a fluid manner, scattering around a multi-channel space

[MULTICHANNEL] MCHSHRED

Multi-channel shred: cut sound into random segments and re-assemble them in random order within the original duration

[MULTICHANNEL] MCHSTEREO

Combine two sereo files in a multi-channel output

[MULTICHANNEL] MCHZIG ZAG

Extend by reading back and forth in the soundfile, while panning to a new channel at each 'zog' or 'zag'

COMBINE **MEAN** 

Generate the mean of two spectra

SUBMIX MERGE

Quick mix of 2 soundfiles (with same number of channels)



#### SUBMIX MERGEMANY

Quick mix of several soundfiles (with the same number of channels)

## SUBMIX MIX

Mix sounds as instructed in a mixfile

## SUBMIX MODEL

Replace soundfiles in an existing mixfile

### **TEXTURE MOTIFS**

Create a texture with motifs

#### TEXTURE **MOTIFSIN**

Create a texture with motifs forced onto a harmonic field

# [MULTICHANNEL] MTON

Create a multi-channel equivalent of a mono soundfile

# [MULTICHANNEL] MULTIMIX

Create a multi-channel mixfile

#### DISTORT MULTIPLY

Distortion by multiplying 'wavecycle' frequency

# N

# [MODIFY] **NEWDELAY**

Delay with pitch-defined output sound

## [MULTICHANNEL] **NEWMIX**

Mix from a multi-channel mixfile to give a multi-channel soundfile output

# [MODIFY] **NEWMORPH & NEWMORPH2**

Morph between dissimilar spectra

## [GRAIN] **NEWTEX**

Generate a texture of grains made from a source sound or sounds

#### [SYNTH] **NEWSYNTH**

Generate complex spectra from fundamental and partial balance information

## [MCTOOLKIT] NJOIN

Concatenate multiple soundfiles, with optional CUE list for CD burning

# [MCTOOLKIT] NMIX

Simple mix of two multi-channel soundfiles, with optional offset

#### BLUR NOISE

Add noise to spectrum

# SYNTH NOISE

Generate noise

# SFEDIT **NOISECUT**

Suppress noise in a (mono) soundfile, replacing with silence

# GRAIN NOISE EXTEND

Find and timestretch noise component in a sound

# REPITCH NOISETOSIL

Replace unpitched windows by silence

# O

# PITCH **OCTMOVE**

Octave transpose without a formant shift (becomes inharmonic) SPECINFO **OCTVU** 

Text display of time varying amplitude of spectrum, within octave bands



#### DISTORT OMIT

Omit A out of every B 'wavecycles', replacing them by silence

## **GRAIN OMIT**

Omit a proportion of grains from a grainy sound

#### SUBMIX **ONGRID**

Convert listed soundfiles to a basic mixfile on timed grid (for editing)

### **TEXTURE ORNATE**

Create a texture with ornaments

#### DISTORT **OVERLOAD**

Clip the signal with noise or a (possibly timevarying) waveform

# P

# [SFEDIT] PACKET

Isolate or generate a sound packet

#### SUBMIX PAN

Pan a mixfile

## [MULTICHANNEL] PANORAMA

Distribute *N* source files in a panorama across a specified angle of a sound-surround loudspeaker array

### [MCTOOLKIT] PAPLAY

Playback of multi-channel soundfiles

## [SFEDIT] PARTITION

Partition a mono soundfile into disjunct files in blocks defined by groups of wavesets

# REPITCH PCHSHIFT

Transpose pitches in a pitch data file by a constant number of semitones (becomes inharmonic)

# REPITCH PCHTOTEXT

Convert binary pitch data to textfile

#### SPECINFO PEAK

Locate time varying energy centre of spectrum (text display)

# **ENVNU PEAKCHOP**

Isolate peaks and rearrange by changing the tempo (Mode 1) OR:

Output a peak-isolating envelope (Mode 2)

# [SPECINFO] PEAK EXTRACT

Extract peaks from an analysis file and write to a text file

# [SNDINFO] **PEAKFIND**

Find the times of the loudness peaks in a sound

# [MODIFY] PHASE

Invert phase or enhance stereo separation of a sound

#### FILTER PHASING

Phase shift a sound, or produce a 'phasing' effect

## PITCH PICK

Only retain channels which might hold specified partials

# DISTORT PITCH

Pitchwarp 'wavecycles' of sound

## REPITCH PITCHTOSIL

Replace pitched windows by silence

# **ENVEL PLUCK**

Pluck start of sound (mono files only)

## HILITE PLUCK

Emphasise spectral changes (use e.g. with HILITE ARPEG)



#### TEXTURE **POSTDECOR**

Create a texture with decorations following events

#### TEXTURE **POSTORNATE**

Create a texture with ornaments following events

#### TEXTURE **PREDECOR**

Create a texture with decorations preceding events

## [SFEDIT] PREFIX SILENCE

Add silence to the beginning of a soundfile

#### TEXTURE **PREORNATE**

Create a texture with ornaments preceding events

#### SPECINFO PRINT

Print data in an analysis file as text to file

#### SNDINFO PRNTSND

Print sound sample data to a textfile

#### SNDINFO PROPS

Display properties of a soundfiling-system file

# [PSOW] PTOBRK

Convert binary pitch trace file (.frq) to breakpoint textfile format for PSOW

# DISTORT PULSED

Impose regular pulsations on a sound

## **ONEFORM PUT**

Impose the formant-envelope in a single-moments-formant datafile onto the sound in an analysis file

# FORMANTS PUT

Impose formants in a formant data file on the spectrum in a PVOC analysis file [SYSUTILS] **PUTCOL** 

Place a column of numbers into a textfile

#### [SYSUTILS] PVPLAY

Play back (audition) an analysis or soundfile

# Q

# REPITCH QUANTISE

Quantise pitches in a pitch data file

# R

#### SPECNU RAND

Randomise the order of spectral windows

# SNDINFO RANDCHUNKS

Cut chunks from a soundfile, randomly

## SNDINFO RANDCUTS

Cut a soundfile into pieces, with cuts at random times

# REPITCH RANDOMISE

Randomise pitch line

### **MODIFY RADICAL**

Radical changes to the sound

# [SYSUTILS] RECSF

Record, creating a soundfile (PC only)

# DISTORT REFORM

Modify shape of 'wavecycles'



**PSOW REINFORCE** 

Reinforce the harmonics in a FOF-grain soundfile

GRAIN **REMOTIF** 

Change pitch and rhythm of grains in a grainy sound

HOUSEKEEP REMOVE

Remove existing copies of a soundfile

SPECNU REMOVE

Remove a pitched component from the spectrum of a sound

GRAIN REORDER

Reorder grains in a grainy sound

**DISTORT REPEAT** 

Timestretch file by repeating 'wavecycles'

GRAIN REPITCH

Repitch grains in a grainy sound

DISTORT REPLACE

Strongest 'wavecycle' in each cyclecnt replaces others

**ENVEL REPLACE** 

Replace the existing envelope of an input soundfile with a different envelope

**PSOW REPLACE** 

Combine FOFs of 1<sup>st</sup> sound with the pitch of the 2<sup>nd</sup> sound

SFEDIT REPLACE

Insert a 2<sup>nd</sup> sound into an existing sound, replacing part of the original

DISTORT REPLIM

Timestretch by repeating 'wavecycles' (below a specified frequency)

**ENVEL REPLOT** 

Warp the envelope in a (text) breakpoint envelope file

SPECINFO REPORT

Text report on location of frequency peaks in the evolving spectrum

GRAIN REPOSITION

Reposition grain onsets in a grainy sound

GRAIN RERHYTHM

Change rhythm of grains in a grainy sound

**ENVEL RESHAPE** 

Warp the envelope in a binary envelope file

HOUSEKEEP RESPEC

Alter the specification of a soundfile

[SFEDIT] **RETIME** 

Rearrange and retime events within a soundfile

**MODIFY REVECHO** 

Create reverb, echo or resonance around a sound

[REVERB] REVERB

Multi-channel reverberation

DISTORT REVERSE

Cycle-reversal distortion, 'wavecycles' reversed in groups

**GRAIN REVERSE** 

Reverse order of grains in a grainy sound, without reversing the grains themselves

GRAIN R EXTEND

Extend sounds that are iterative

[MCTOOLKIT] RMSINFO

Scan file and report RMS and average power level statistics

[REVERB] ROOMRESP

Create early reflections data file for REVERB, ROOMVERB and TAPDELAY

[REVERB] ROOMVERB

Multi-channel reverberation with room simulation



# S

#### **MODIFY SAUSAGE**

Granular reconstitution of several soundfiles scrambed together

#### **ENVEL SCALED**

Impose envelope, scaling envelope times to soundfile duration

#### MODIFY **SCALEDPAN**

Distribute sound in stereo space, scaling pan data to soundfile duration

#### **BLUR SCATTER**

Randomly thin out the spectrum

#### **EXTEND SCRAMBLE**

Cut random chunks from soundfile and splice end to end; Or, Cut file into random chunks and rearrange; repeat differently, etc.

# FORMANTS **SEE**

Convert formant data in binary formant data file to a pseudo soundfile for viewing

## PITCHINFO SEE

Convert binary pitchfile or transposition file to a pseudo-soundfile, for viewing [BLUR] **SELFSIM** 

Replace spectral windows with the most similar, louder window(s)

### **EXTEND SEQUENCE**

Produce a sequence from one sound, with timed transpositions

### **EXTEND SEQUENCE2**

Produce a sequence from several sounds, with timed transpositions

# [MCTOOLKIT] SFPROPS

Display soundfile details, with WAVE EX speaker positions

## STRANGE **SHIFT**

Linear frequency shift of (part of) the spectrum (becomes inharmonic)

### [EXTEND] SHIFTER

Generate simultaneous repetition cycles, shifting focus from one to another

# [EXTEND] **SHRINK**

Repeat a sound, shortening it on each repetition

#### MODIFY **SHUDDER**

Shudder a soundfile

#### BLUR SHUFFLE

Shuffle analysis windows according to a specific scheme

## DISTORT SHUFFLE

Distortion by shuffling 'wavecycles'

# SUBMIX SHUFFLE

Shuffle the data in a mixfile

# SEARCH **SIGSTART**

Find earliest time at which there is signal in two or more soundfiles.

#### SYNTH SILENCE

Make a silent soundfile

## [SFEDIT] SILEND

Add silence to end of file

# TEXTURE **SIMPLE**

Create textures from single events

# SPECNU SLICE

Divide an anlysis file into individual frequency bands, saving each as a separate analysis file

## REPITCH **SMOOTH**

Smooth pitch contour in a pitch data file

## SNDINFO **SMPTIME**

Convert sample count to time in soundfile



#### HOUSEKEEP **SORT**

Sort files listed in a textfile

#### MODIFY **SPACE**

Create or later the distribution of sound in stereo space

## **PSOW SPACE**

Distribute the alternate FOFs in the sound over a stereo space

#### MODIFY **SPACEFORM**

Create a sinusoidal spatial distribution data file

#### SUBMIX **SPACEWARP**

Alter spatial distribution of a mixfile

# [SPECINFO] SPECGRIDS

Partition the spectrum into parts, over a grid

### [COMBINE] SPECROSS PARTIALS

Interpolate partials of pitched inanalfile1 towards those of pitched inanalfile2

## [COMBINE] **SPECSPHINX**

Impose the channel amplitudes of analfile2 onto the channel frequencies of analfile1

#### SYNTH SPECTRA

Generate both channels of a stereo spectral band

#### STRETCH **SPECTRUM**

Stretch/compress the frequencies in the spectrum

#### [COMBINE] **SPECTWIN**

Combine the formant and/or total spectral envelopers of two spectra

# MODIFY **SPEED**

Change the speed and pitch of the source sound

#### SFEDIT **SPHINX**

Switch between several files, with different switch times, to make new sound

#### **PSOW SPLIT**

Split vocal FOFs into subharmonic and upwardly transposed pitch regions

# BLUR **SPREAD**

Spread spectral peaks

# SPECNU **SQUEEZE**

Squeeze the spectrum into a frequency range, around a specified centre frequency

#### MODIFY **STACK**

Create a mix that stacks transposed versions of the source on top of one another

#### FOCUS **STEP**

Step-frame through a sound by freezing the spectrum at regular time intervals [MULTICHANNEL] **STRANS MULTI** 

Change the speed or pitch of a multi-channel sound, or add vibrato

### PSOW **STRETCH**

Timestretch/transpose a sound by repositioning the pitch-synchronised grains.

The grains themselves are not time-stretched

#### [STRETCH] STRETCHA

Utility to calculate *timestretch* factor for use with STRETCH TIME

# **PSOW STRTRANS**

Timestretch/transpose a sound by repositioning the pitch-synchronised grains, with overlap

# [SFEDIT] SUBTRACT

Subtract one file from another

## SPECNU SUBTRACT

Eliminate from the source file any persisting signal that falls below a threshold (defined by the *noisfile*) AND subtract the amplitude of the noise in the *noisfile* from any source file signal that is passed

# COMBINE **SUM**

Add one spectrum to another



#### SNDINFO SUMLEN

Sum durations of several soundfiling-system files

### [FOCUS] SUPERACCU

Sustain each spectral band until louder data appears in that band

#### **BLUR SUPPRESS**

Suppress the most prominent channel data

#### PSOW **SUSTAIN**

Sustain a pitch-synchronised FOF-grain within a sound – a freeze effect with optional vibrato

# **PSOW SUSTAIN2**

Sustain a time-specified (start-end) FOF within a sound – a freeze effect with optional vibrato

#### FILTER SWEEPING

Filter whose focus-frequency sweeps over a range of frequencies

#### **ENVEL SWELL**

Cause sound to fade in and out from a peak moment

### SFEDIT SYLLABLES

Separate out vocal syllables

### SUBMIX SYNC

Synchronise soundfiles in a mixfile, or generate such a mixfile from a list of soundfiles

#### SUBMIX **SYNCATTACK**

Synchronise attacks of soundfiles in a mixfile, or generate such a mixfile from a list of soundfiles

#### **PSOW SYNTH**

Impose vocal FOFs on a stream of synthesised sound

#### **PVOC SYNTH**

Convert spectral file to soundfile

#### REPITCH **SYNTH**

Create spectrum of vowel sounds, following pitch contour in pitch data file

# Ť

## [REVERB] TAPDELAY

Stereo multi-tapped delay line with feedback

# [MULTICHANNEL] TANGENT group

Place one or more mono soundfiles along a tangent path to an 8-channel array DISTORT **TELESCOPE** 

#### Time-contract sound by telescoping cyclecnt 'wavecycles' to 1

# SUBMIX TEST

Test the syntax of a mixfile

## [MULTICHANNEL] TEXMCHAN

Create textures over a multi-channel frame

## STRETCH TIME

Stretch/ compress a sound in time without changing the pitch

# TEXTURE **TIMED**

Create a texture with timed single events

#### SNDINFO TIMEDIFF

Find difference in duration of two sound files

# **ENVEL TIMEGRID**

Partition a soundfile into a sequence of 'windows' separated by silence

## SNDINFO TIMESMP

Convert time to sample count in soundfile



#### GRAIN TIMEWARP

Stretch (or shrink) the duration of a grainy sound, without stretching the grains themselves

#### SUBMIX TIMEWARP

Timewarp the data in a mixfile

#### TEXTURE **TGROUPED**

Create a texture with timed event groups

#### **TEXTURE TMOTIFS**

Create a texture with timed motifs

#### TEXTURE **TMOTIFSIN**

Create a texture with timed motifs forced onto a harmonic field

#### [ENVEL] TOPANTAIL2

Gated sound extraction with end trims and backtracking

## HILITE TRACE

Highlight *n* loudest partials, at each moment (window) in time

# [MULTICHANNEL] TRANSIT group

Place one or more mono soundfiles on a path into and across an 8-channel array

### PITCH TRANSP

Shift pitch of (part of) the spectrum, keeping harmonic relationships

#### REPITCH TRANSPOSE

Transpose spectrum (spectral envelope also moves)

## REPITCH TRANSPOSEF

Transpose spectrum: but retain original spectral envelope

#### [ENVEL] TREMOLO

Apply width-controlled tremolo to a soundfile

#### **ENVEL TREMOLO**

Tremolo a sound

#### PITCH TUNE

Replace spectral frequencies by harmonics of specified pitch(es)

## [PITCH] TUNEVARY

Replace spectral frequencies with the harmonics of specified pitch(es), in a time-varying manner

## SFEDIT TWIXT

Switch between several files, to make a new sound



#### SNDINFO **UNITS**

Convert between different units

#### FILTER USERBANK

User-defined filterbank, with time-variable Q



#### FILTER VARIABLE

Lo-pass, high-pass, band-pass or notch filter, with variable frequency

# FILTER VARIBANK

User-define time-varying filterbank, with time-variable Q

# [SYSUTILS] **VECTORS**

Numerical operations between two columns of figures



FILTER VFILTERS

Make (text) datafiles for fixed-pitch FILTER VARIBANK filters

REPITCH VIBRATO

Add vibrato to pitch in a pitch data file

FORMANTS **VOCODE** 

Impose spectral envelope of one 2<sup>nd</sup> sound onto 1<sup>st</sup> sound

HILITE VOWELS

Impose vowels on a sound

REPITCH VOWELS

Create spectrum of vowel sounds, following pitch contour in a pitch data file

# W

SYNTH WAVE

Generate simple waveforms

STRANGE WAVER

Oscillate between harmonic and inharmonic state

**BLUR WEAVE** 

Weave amongst the analysis windows in a specified pattern

SPECINFO WINDOWCNT

Returns the number of analysis windows in infile

[GRAIN] WRAPPAGE

Granular reconstitution of one or more soundfiles over multi-channel space

# Z

# **SNDINFO ZCROSS**

Display fraction of zero-crossings in a soundfile

SFEDIT **ZCUT** 

Cut and keep a segment of a MONO soundfile, cutting at zero crossings (no splices)

SFEDIT ZCUTS

Cut and keep segments of a MONO soundfile, cutting at zero crossings (no splices)

PITCHINFO ZEROS

Shows whether a pitch file contains uninterpolated zeros (unpitched windows)

EXTEND **ZIGZAG** 

Read back and forth inside a soundfile

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